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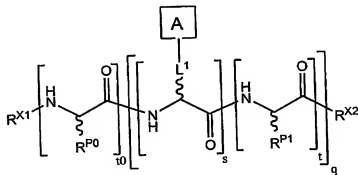
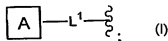
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(54) Title: METHOD FOR PREPARING POLYFUNCTIONALIZED PEPTIDES AND/OR PROTEINS VIA NATIVE CHEMI-
CAL LIGATION



(57) Abstract: The present invention provides a method for preparing polyfunctionalized peptides and/or proteins at non-adjacent designated sites via native chemical ligation. In certain embodiments, the inventive method is a method for preparing a polyfunctionalized peptide comprising a peptidic backbone made up of four or more amino acids, wherein two or more non-adjacent amino acids are independently substituted with a moiety having the structure: wherein A and L¹ are as defined herein. In certain other embodiments, the inventive method allows the preparation of polyfunctionalized peptides having the general structure: wherein A, R^{P0}, R^{P1}, R^{X1}, R^{X2}, L¹, L², s, and q are as defined herein.